

Appl.No. 10/709,068
Amdt. Dated Oct. 18,2004
Reply to Office action of August 25th 2004
Amendments to the Drawings:



FIG 1 & FIG 2, that were deemed to be inadequate in the original submission, have been amended to the following set of drawings and will replace all prior versions in the application

## Brief Description of the Several Views of the Drawing

Note: Use the block diagram of FIG. 2 to reference the sub assemblies, their drawings and FIG. Numbers.

- FIG. 1 is a diagram of the embodiment of a typical system as used on the prototype and preproduction version. A 5 foot deep, below ground tank was used for this purpose and for making drawings FIG. 3 FIG.5.
- FIG. 2 is a block diagram showing the complete system and its components referencing the appropriate assemblies and their drawings.
- FIG. 3 shows the mechanical detail of the integrated assembly. Inner probe, outer sheath, electronics box and interconnecting cables.
- FIG. 4 shows the mechanical details of the outer sheath
- FIG. 5 shows the mechanical details of the inner probe.
- FIG. 6 shows how the design would be changed for the embodiment of a 4-foot deep system.
- FIG.7 is a complete electronic schematic of the electronics box.
- FIG 8 shows the detail of the plate connection and associated parts.
- FIG 9 shows the detail of the probe connector assembly 007.
- FIG. 10 shows the detail of interconnecting cable assembly 003
- FIG. 11 shows the mechanical assembly of the display electronics box.
- FIG 12 shows the detail of display electronics box interconnecting cable assembly 004
- FIG. 13 shows connection detail of Optional Data Output J1..
- FIG. 14 shows the display electronics box front panel



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- FIG 15 shows the drilling data of the front panel.
- FIG. 16 shows a photograph of the Electronics Display Box pre production version.
- FIG. 17 shows a photograph of the probe assembly (5 foot version).
- Table 1: A complete parts list of the components illustrated in FIG 7, & 14 is given in Table 1.
- TABLE 2: A complete parts list of the components illustrated in FIG 1 5 is given in Table 2
- TABLE 3: Sample measurements were carried out on common materials to test their compatibility. The results are shown in Table 3.
- TABLE 4: Table 4 was included for comparison of some published figures of EC (electrical conductivity) and their respective TDS (Total Dissolved salts) for naturally occurring water.